

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
6 April 2006 (06.04.2006)

PCT

(10) International Publication Number  
**WO 2006/036000 A1**

(51) International Patent Classification:

*HOIL 21/3205 (2006.01)*   *HOIL 23/52 (2006.01)*  
*HOIL 21/768 (2006.01)*   *HOIL 23/522 (2006.01)*  
*HOIL 21/822 (2006.01)*   *HOIL 27/04 (2006.01)*  
*HOIL 21/8234 (2006.01)*   *HOIL 27/06 (2006.01)*

(74) Agent: ITOH, Tadahiko; 32nd Floor, Yebisu Garden Place Tower, 20-3, Ebisu 4-chome, Shibuya-ku, Tokyo 150-6032 (JP).

(21) International Application Number:

PCT/JP2005/018396

(22) International Filing Date:

28 September 2005 (28.09.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2004-289182      30 September 2004 (30.09.2004)    JP

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

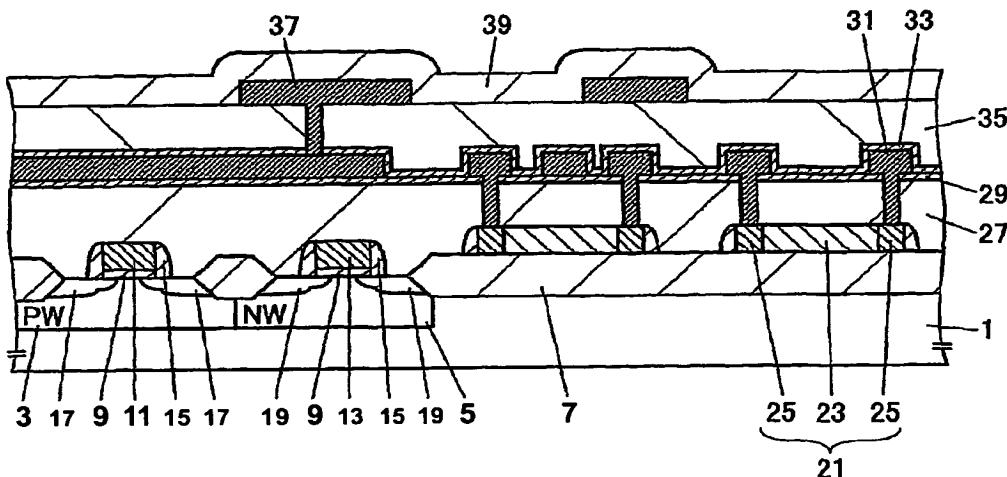
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SEMICONDUCTOR DEVICE AND FABRICATION PROCESS THEREOF



(57) Abstract: A semiconductor device includes a semiconductor substrate, a polysilicon pattern formed on the semiconductor substrate via an insulation film, an interlayer insulation film formed on the semiconductor substrate so as to cover the polysilicon pattern, and a metal interconnection layer pattern formed on the interlayer insulation film, wherein the metal interconnection layer pattern carrying silicon nitride films respectively on a top surface, a bottom surface and sidewall surfaces thereof.

WO 2006/036000 A1